



October 3, 2012

Alex Polanco
Old Veteran Construction, Inc.
10942 S. Halsted St.
Chicago, IL 60628

RE: 164 E. Grand Ave, Chicago, IL. Thorium Monitoring

Dear Mr. Polanco:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide thorium monitoring of an excavation and soil stockpile inside a building located at 164 E. Grand Avenue. The monitoring was performed on October 3, 2012.

Instrumentation

Surface gamma scans were performed by Glenn Huber using a Ludlum Model 2221 Scaler / Ratemeter with attached 2"x2" NaI probe. The instrument was calibrated on November 8, 2011. The USEPA action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 19,110 counts per minute (cpm). A six inch collimated shield was used for additional surveys with an action level of 6,591 cpm. All count rates detailed below are unshielded, unless otherwise noted.

The average background count rate inside of the building is approximately 12,000 - 14,000 cpm. The background count rate is likely elevated due to naturally occurring radioactive material found in the brick of the building walls. A typical outdoor background count rate would range from 4,000 - 8,000 cpm. The on-contact count rate of the interior of the brick walls ranged from 15,500 – 17,500 cpm

Soil Gamma Scans

Gamma surface scans were performed using the Ludlum Model 2221 Scaler / Ratemeter described above. A surface scan of the existing soil/sand stockpile was performed with most count rates ranging from 12,000 cpm – 18,000 cpm. A small spot was identified on the pile with an on-contact count rate of 27,300 cpm (8,100 cpm shielded). I collected a sample at this location and performed a screening gamma spectroscopy analysis at the SAHCI laboratory. See Attachment 1.

Limited gamma surface scans were performed on the inside of the existing trench due to accessibility issues. In the small portion that I was able to check a spot was identified with a count rate of 57,100 cpm (17,600 cpm shielded). I also collected a sample at this location. The elevated count rates appear to be due to a layer of cinder like material near the surface of the floor slab. See Attachment 2 for photographs of this location.

Additional Monitoring

Since surface gamma scans and screening soil analysis indicates the presence of thorium in concentrations greater than the USEPA guideline level, I recommend contacting Verneta Simon, USEPA, at (312) 885-3601 before conducting any further construction activities onsite.

Thank you for your assistance with this project. If you have any questions or need additional information please call me at (815) 485-6161.

Sincerely,
Stan A. Huber Consultants, Inc.

A handwritten signature in black ink, appearing to read 'Glenn Huber', with a long horizontal flourish extending to the right.

Glenn Huber, CHP
President

Attachment 1

Gamma Spec Report - 164 E. Grand Ave - Old Veteran Construction

Stan A. Huber Consultants, Inc.
200 North Cedar Road
New Lenox, IL 60451
(800) 383-0468

Instrument ID:

Canberra Genie 2000 Nal Gamma Spec System
2"x2" Nal detector w/ pulse height analysis software package

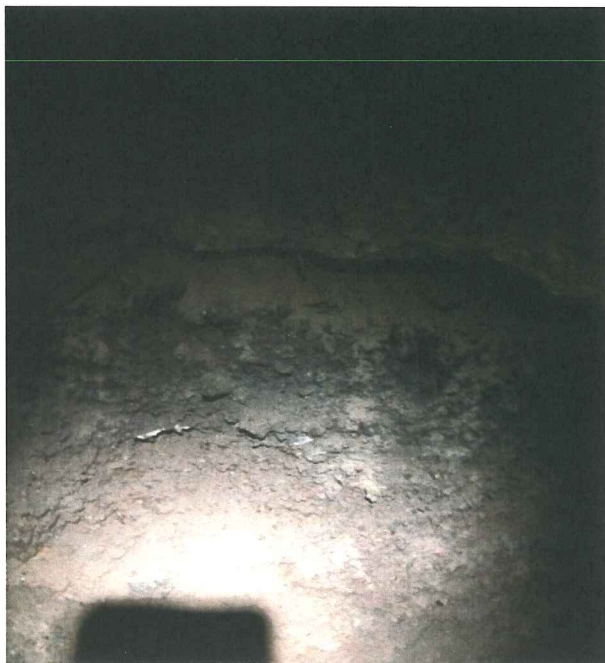
Summary Report - Samples Collected on October 3, 2012

Sample ID	Analysis Date	Sample Group	Description	Weight (g)	U-238 Activity	U-238 Uncertainty	Th-232 Activity	Th-232 Uncertainty	Ra-226 Activity	Ra-226 Uncertainty	Total Radium Activity	Total Radium Uncertainty
3969	10/3/2012	background	bkg100312	7.5	-0.93	3.14	0.6	1	-0.85	1.32	-0.25	1.66
3970	10/3/2012	soil standard	soilstd100312	36.9	-2.65	5.6	5.18	1.82	2.13	2.28	7.31	2.92
3971	10/3/2012	164 E. Grand Ave	S6753 Trench Wall Spot	18.7	-56.43	21.29	54.49	6.7	17.26	8.43	71.75	10.77
3972	10/3/2012	164 E. Grand Ave	S6754 Stockpiled Soil Spot	29.8	-6.45	7.1	11.4	2.22	7.02	2.88	18.42	3.64

All results are in pCi/gram

** Important Note: System has not been calibrated for U-238 and the analytical results detailed above for U-238 should not be used or considered accurate

Attachment 2



← Cinder-like material layer w/ elevated count rate